



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

spectroscopists to explain *Nova Aurigæ's* spectrum would necessarily give way to the more *general* theories.

When this star is on the meridian of Mt. Hamilton, its altitude above the horizon is only about $2\frac{1}{2}^{\circ}$. While observations of it will be attempted here in February and the following months, they cannot be successful in more than a very limited degree.

We quote in the following article Professor PICKERING'S account of the discovery, as published in the *Astronomische Nachrichten*.
W. W. C.

A NEW STAR IN *NORMA*.

"A new star appeared in the constellation *Norma* during last summer. It was discovered by Mrs. M. FLEMING on October 26, when examining a photograph of the spectra of the stars in its vicinity. The photograph was taken on July 10, 1893, at the Arequipa station of this observatory by Professor SOLON J. BAILEY. The spectrum appears to be identical with that of the new star which appeared in *Auriga* in December, 1891. Comparing the spectra of the two stars taken with nearly the same dispersion, about a dozen lines are visible in each and are identical in wave-length. The hydrogen line $H\beta$ which is bright in both stars is more intense in the star in *Norma* than in that in *Auriga*. It is in fact more intense in the former star than any other line in the spectrum, while the $H\gamma$ line is generally the strongest in *Nova Aurigæ*.

"A photograph taken June 21, 1893, showed the spectra of stars of the 10th magnitude, but no trace of the new star was visible upon this plate, although it covered the same region and was in other respects like that taken on July 10. Photographic charts of the same region taken on June 6, June 10, July 21, 1889; May 16, May 16, June 10, June 23, June 23, 1891; May 7 and May 27, 1893, show no image of this object, although stars of the 14th magnitude are visible upon some of them. We may therefore conclude that the star appeared within ten days of the first of July, and that previously it was either invisible or extremely faint.

"The position was found by comparing the ends of the hydrogen lines $H\gamma$ and $H\delta$ which are bright in this star, with the corresponding dark lines in the adjacent stars *Cord. G. C.* 20940 and 21006. They give the approximate mean position for 1900 in Right Ascension $15^h 22^m 12^s$, Declination $-50^{\circ} 13' 8''$. A more

accurate position can be found if photographic charts can be taken showing this star. Professor BAILEY has been notified of this discovery and if the star is still bright enough, he will doubtless obtain photographs showing its position and spectrum.

"The similarity of these two new stars is interesting; first, since it has proved a means of discovering one of these objects, and secondly, because if confirmed by other new stars it will indicate that they belong to a distinct class resembling each other in composition or physical condition.

"The star was approximately of the 7th magnitude photographically on July 10, since it was about equal to *Cord. G. C. 20910*, magnitude 6.9, whose spectrum is of the second type. The nearest catalogue stars are *Cord. G. C. 20940*, magnitude 8, which has a spectrum of the first type, and *Cord. G. C. 20926*, magnitude $8\frac{3}{4}$, which has a spectrum of the second type. The new star lies nearly midway between these two."

EDWARD C. PICKERING,

Director Harvard College Observatory.

CAMBRIDGE, MASS., U. S. A., Nov. 9, 1893.

THE DISCOVERY OF ASTEROIDS IN 1893.

Thirty-four minor planets were discovered in 1893: eight by WOLF of Heidelberg, twenty-five by CHARLOIS of Nice and one by BORELLY of Marseilles. WOLF and CHARLOIS used the photographic method, first successfully employed by WOLF in 1891.

The number of minor planets now known is about 380. The rate of their discovery by photography in the past two years has been so rapid that the computers are no longer able to make the computations for determining their orbits properly. We believe that Dr. WOLF has for this reason desisted from making further special search for them. Dr. WOLF's decision is to be commended. The cosmical questions with which the asteroids may be connected will certainly be nearest solution if the computations for those already discovered are kept up to date.

W. W. C.

CONFERRING OF THE DEGREE OF DOCTOR OF MATHEMATICAL SCIENCES UPON MISS DOROTHEA KLUMPKE.

Mlle. KLUMPKE, who has just gained the degree of Doctor of Mathematical Sciences at the Sorbonne, is the first lady who has obtained that distinction. The full title of her thesis was "Con-